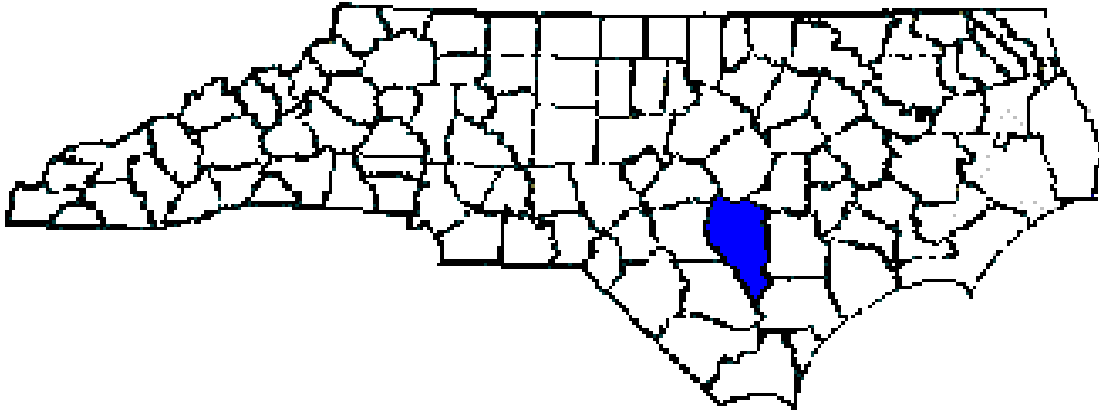


# ANNUAL REPORT FOR 2009



**Big Swamp Mitigation Site  
Sampson County  
TIP No. B-4271**



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# TABLE OF CONTENTS

SUMMARY .....	1
1.0 Introduction .....	2
.1 Project Description .....	2
.2 Purpose .....	2
.3 Project History .....	2
2.0 Vegetation: .....	3
.1 Success Criteria .....	3
.2 Description of Species.....	3
.3 Results of Vegetation Monitoring .....	3
.4 Conclusions. ....	3
3.0 Overall Conclusions and Recommendations .....	3

## FIGURES

Figure 1 – Site Location Map .....	4
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## APPENDICES

Appendix A – Site Photos	
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## **SUMMARY**

The Big Swamp Mitigation Site is located in Sampson County. The site was planted in March 2008 and was designed as wetland mitigation for impacts associated with bridge project B-4271.

The mitigation encompasses approximately 0.06 acres total of wetland restoration with 0.03 acres of the restoration occurring underneath the new bridge span. The restoration effort involved removing causeway fill and transition area along both approaches to Bridge No. 98 to match the adjacent wetland evaluation. The restoration area was re-vegetated with bottomland hardwood species. Hydrologic monitoring is not required for this project; however vegetation monitoring is required for three years.

After the second year of monitoring, the Big Swamp Mitigation Site shows by visual observation that the restoration area is re-attaining wetland jurisdictional status and tree species planted in the wetland restoration area are surviving.

NCDOT proposes to continue vegetation monitoring of this site.

## **1.0 INTRODUCTION**

### **1.1 Project Description**

The Big Swamp Mitigation Site is located at Bridge No. 98 on SR 1246 (Butler Island Rd.) over Big Swamp (Figure 1). The site consists of approximately 0.06 acres of mitigation for wetland impacts associated with project B-4271.

### **1.2 Purpose**

In order for a mitigation site to be considered successful, the site must meet vegetation success criteria. This report details the vegetation monitoring in 2009 at the Big Swamp Mitigation Site. Hydrologic monitoring was not required for the site.

### **1.3 Project History**

March 2008	Site Planted
July 2008	Visual Monitoring (1 year)
March 2009	Supplemental Planting
July 2009	Visual Monitoring (2 year)

## **2.0 VEGETATION: BIG SWAMP MITIGATION SITE (YEAR 2 MONITORING)**

### **2.1 Success Criteria**

NCDOT shall monitor the restoration site by visual observation and photo points for survival and aerial cover of vegetation. NCDOT shall monitor the site for a minimum of three years or until the site is deemed successful. Monitoring will be initiated upon completion of the site planting.

### **2.2 Description of Species**

The following tree species were planted in the Wetland Reforestation area:

*Liriodendron tulipifera*, Tulip Poplar

*Platanis occidentalis*, Sycamore

*Fraxinus pennsylvanica*, Green Ash

### **2.3 Results of Vegetation Monitoring**

The wetland restoration area is re-attaining jurisdictional status and the planted species are surviving. The areas where the planted species did not survive, as noted last year, were supplementally planted in March 2009.

**Site Notes:** Other species noted: briars, woolgrass, *Juncus* sp., ragweed, red maple, sweetgum, and various wetland species.

### **2.4 Conclusions**

There were approximately 0.06 acres total of wetland restoration on site. There were no plots established on the site. By visual observation, the Big Swamp Mitigation Site shows that the planted species are surviving in some of the planted areas and that the restoration area is re-attaining wetland jurisdictional status.

## **3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS**

NCDOT proposes to continue vegetation monitoring at the Big Swamp Mitigation Site.

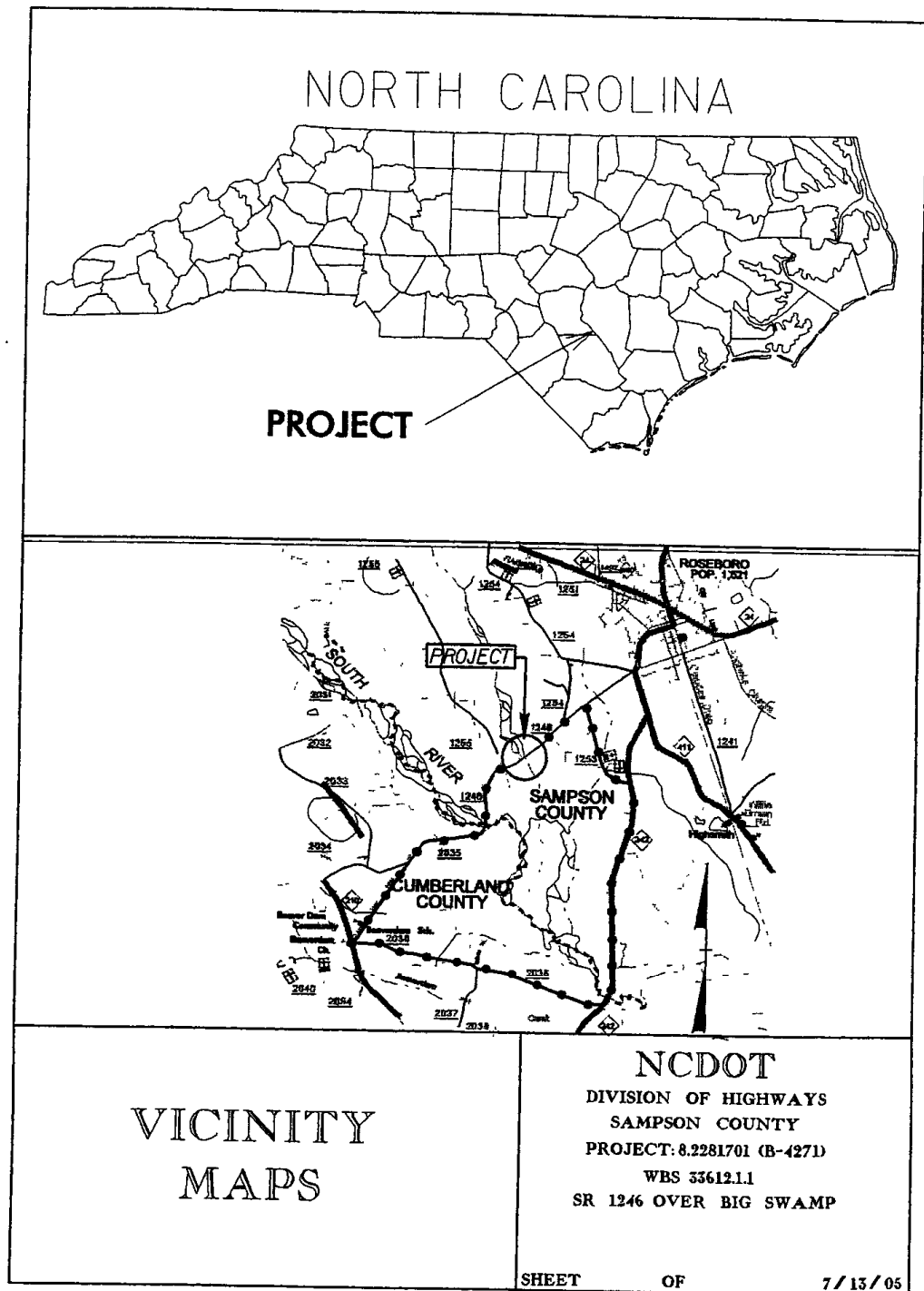


Figure 1. Site Location Map

**APPENDIX A**

**SITE PHOTOS**

# Big Swamp Mitigation Site



Photo 1



Photo 2



Photo 3



Photo 4